

REMARKS

Claims 24-51 are pending. Applicant respectfully notes the Office Action erroneously states claims 24-50 are pending when claims 24-51 were added via the Preliminary Amendment filed December 7, 2001. By this Amendment, Claim 39 is amended. No new material is presented.

Allowable Subject Matter

Applicant respectfully acknowledges and appreciates the indication by the Examiner that Claims 28-30, 36-38, and 40-50, although objected to for being dependent upon a rejected base claim, i.e., Claim 24, would be allowable if amended or rewritten to be in independent form, including all of the features of the base claim and any intervening claims.

Applicant also respectfully acknowledges and appreciates the indication by the Examiner that Claim 39 would be allowable if rewritten to overcome the rejection of the claim under 35 U.S.C. §112, 2nd paragraph.

Abstract

The Abstract is objected to for not being in the form of a single paragraph of no more than 150 words. Enclosed herein is a Substitute Abstract to be substituted for the originally filed Abstract. The Substitute Abstract is believed to be in proper format and length. Withdrawal of the objection is respectfully requested.

35 U.S.C. §112, 2nd paragraph

Claim 39 is rejected under 35 U.S.C. §112, 2nd paragraph. The claim has been amended responsive to the rejection. Withdrawal of the rejection is respectfully requested.

Claims 24-51 Recite Patentable Subject Matter

Claims 24-27 and 31-35 are rejected under 35 U.S.C. §103(a) as being unpatentable over European Patent Publication Number 0 072 874 to Yokoyama et al. (hereinafter referred to as "Yokoyama"). Applicant respectfully traverses the rejection.

Independent Claim 24 recites a plant for producing a metal band coated with at least one protection layer including means for controlling the running of the band M, successively, through a series of treatment sections, placed one after the other in a continuous line, and including at least, in one running direction of the band: a supply section A, a first metal coating section B with two lateral sides perpendicular to a longitudinal running direction of the band M, respectively a first side B1 and a second side B2, and including a means for feeding the band into the metal coating section B, located at a low level of the first side B1 thereof and ending in a tub fillable with a liquid metal bath, means for guiding the band along a first running path including an immersion section penetrating into the tub for depositing metal on the band M, a rising section extending along a substantially vertical direction between an exit from the tub and a first high level and a falling section extending between the first high level and a first exit means from the first coating section B, located at a first low level on the second side B2 thereof, cooling means being arranged at least along the rising section of the first running path for solidification of the metal deposited on the band M, a second application coating section C, located beside the first section B and having two sides spaced apart perpendicular to the running direction, respectively a first side C1 extending along the second side B2 of the metal coating section B and a second side C2, wherein the second coating section C includes second means for coating the band

M that are placed at a second low level of the first side C1, means for guiding the band along a second running path passing in front of the second coating means and including at least one rising section extending vertically between the low level of the second coating section C and a second high level, along which are placed means for drying the coating after application, and a second exit means from the second coating section C, placed on the second side C2 thereof, and an exit section D receiving the band from the second exit means and including at least one band accumulator and winding means .

Applicant respectfully submits that at the very least, Yokoyama does not disclose or suggest the “second” coating section 16, 17 as being located beside the “first” coating section 9. Rather, Yokoyama discloses a temper rolling mill 14 and trimmer 15 disposed between the “first” and “second” coating sections 9 and 16, respectively. Put simply, Yokoyama clearly discloses the temper rolling mill 14 and trimmer 15 being located intermediate (i.e., between) the “first” and “second” coating sections. Accordingly, the “first” and “second” coating sections disclosed by Yokoyama are not located beside each other as are the first and second coating sections recited by independent claim 24 of the instant application.

The Office Action essentially admits Yokoyama does not teach the structural arrangement recited by pending Claim 24. However, the Office Action argues it would have been obvious to one of ordinary skill in the art to rearrange the coating sections disclosed by Yokoyama to arrive at the invention recited by pending Claim 24 as, according to the Office Action, Yokoyama uses all of the components recited by Claim 24 to perform substantially the same process to achieve substantially the same result.

The Office Action then cites two cases to support the stated position.

The first case, i.e., In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966), is identified as an example of where courts have held the common practice of changing the shape of at least one feature of a claimed invention requires only ordinary skill in the art and is considered routine. In particular, the court in In re Dailey held that to change the shape of a claimed plastic nursing container was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant.

The second case, i.e., In re Japiske, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950), is identified as an example of where courts have held the common practice of rearranging the location or orientation of at least one feature of a claimed invention requires only ordinary skill in the art and is considered routine. In particular, the court in In re Japiske held that to shift the position of a starting switch for a hydraulic power press to a different location on the press would have been obvious to one of ordinary skill in the art as it would not have modified or otherwise altered operation of the power press.

However, Applicant respectfully notes that the Board of Patent Appeals and Interferences held that “[t]he mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims . . . is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reasons for the worker in the art, without the benefit of the applicant’s [sic] . . . specification, to make the necessary changes in the reference device.” See Ex parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984).

With the above in mind, Applicant has reviewed Yokoyama, notes Yokoyama fails to provide the requisite motivation to rearrange parts as alleged by the Office Action, and provides the following comments.

As evident from the disclosure, a goal of Yokoyama is to provide a dual-purpose plant capable of being used for producing both cold rolled steel sheets and hot-dip galvanized steel sheets. As shown in Figure 1 of Yokoyama, a sketch of which is enclosed herein as Exhibit 1, the Yokoyama plant includes numerous, separate and distinct, vertical zones disposed in series to each other. Moreover, Yokoyama clearly teaches the overaging zone (8) and the secondary cooling zone (11) are equipped with a bypass (22) for directly connecting the two zones with each other.

The objective and corresponding structure of the present invention is patentably distinct from the Yokoyama plant as the problem to be solved by the present invention is quite different from the problem solved by the Yokoyama plant.

In the present invention, the Applicant notes the customers' requirements are quite varied and, according to the foreseen usage, it may be necessary for the plant recited by independent Claim 24 to provide for galvanization; or paint; or even two superimposed protection layers on the metal band. See page 3, lines 3-5 of the present application. Thus, as recited by independent Claim 24, the plant includes a first metal type (e.g., galvanising) section B beside a second application-type coating (e.g., painting) section C. Applicant respectfully, but forcefully, points out that Yokoyama does not teach or suggest a second application-type coating or painting section. Moreover, as explained on page 9, lines 10-15 of the present application, in the second

application-type coating or painting section, the band passes at least in front of a first application coating (enduction) device (61) and is dried in a vertical furnace (62).

Furthermore, as stated on page 10, lines 8-14 of the present application, each coating section B, C is therefore inscribed in a rectangular block having two vertical lateral sides perpendicular to the general horizontal running direction of the band and whose height depends on the time necessary, on the one hand to the solidification of the zinc and, on the other hand, to the drying of the paint, taking into account the running speed. When two coats of paint are necessary, it is possible, as indicated above, to reduce the height of the section by folding the running path into two parallel columns. Therefore, Applicant respectfully submits that even if the chemical treatment section (16) of the Yokoyoma plant is vertical, such a chromatation section may be horizontal as the chromating or phosphating equipment (53) of the present invention when the painting and drying section C must be vertical.

Additionally, if the chemical treatment section (16) of the Yokoyoma plant is considered to correspond to the "second application-type coating section" of the present invention, the disposition of both sections are completely different from each other, as comparatively illustrated by Exhibit 1.

Indeed, the Yokoyoma plant includes a plurality of vertical sections disposed in series, respectively, a heating zone (5), a soaking zone (6), a primary cooling zone (7) an overaging zone (8), a galvanising zone 9 with cooling means (10), a secondary cooling zone (11), and a chemical treatment section (16). Thus, the Yokoyoma plant includes many zones of substantial height. Regardless, as clearly shown in Figure 1 of Yokoyoma and as illustrated in the enclosed sketch of Exhibit 1, the chemical treatment

section (16) is separated from, i.e., not beside, the galvanizing zone (9, 10) by a relatively long distance comprising the secondary cooling zone (11), the temper mill (14), and the trimmer (15).

Claim 24 recites the second application-type coating section C of the plant is located beside the first metal-type coating section B, the second section C having two vertical sides, respectively, a first side C1 extending along the second side B2 of the first section B and a second side C2 on which are placed the entry means (21c) and exit means (28c) of the band. To this purpose, as explained on page 10, lines 15-24 of the present application, the band M exits from the lower part of the second side B2 of the first section B, goes beneath the second section C, returns backwards to enter on the second side C2 of said second section C and exits on the same second side C2. Such a configuration of the plant recited by Claim 24 provides important and beneficial industrial results, which have been explained in the specification.

In particular, by arranging both coating sections B, C besides each other as recited by Claim 24 provides a particularly compact plant including a central portion in which are grouped sections B, C and two lateral portions, respectively supply A and exit D portions. As stated on page 12, line 25 to page 13, line 9, and shown in Figure 3 of the present application, it is therefore possible to provide and install each piece of equipment within a single structure (8) including a central tower (80) having a relatively large height for both coating sections B, C and two relatively smaller halls (81, 81') of smaller height, each fitted with a raceway for traveling cranes 84, 84'.

Therefore, applicant respectfully submits that Yokoyoma lacks the requisite motivation or reasons for one of ordinary skill in the art to modify the arrangement of the

various stations in the Yokoyoma plant as called for in Ex parte Chicago Rawhide Mfg. Co.

Accordingly, Applicant respectfully submits the Office Action has not established *prima facie* obviousness of Claim 24 as outlined in M.P.E.P. §2143.03 since Yokoyama does not teach or suggest all of the features recited by pending Claim 24. Thus, Applicant respectfully submits pending Claim 24 is not rendered obvious by Yokoyama.

Therefore, Applicant respectfully submits pending Claim 24 should be deemed allowable.

Claims 25-51 depend, either directly or indirectly, from Claim 24. It is respectfully submitted that these dependent claims be deemed allowable for the same reasons Claim 24 is allowable as well as for the additional subject matter recited therein.

Applicant respectfully requests withdrawal of the rejection.

Conclusion

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding objection and rejections, allowance of Claims 24-51, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 103120-00028.**

Respectfully submitted,
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Enclosure: Exhibit 1 – Fig. 1 of Yokoyama